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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,929	11/24/2003	Michael Warners	L&L-10224	5237
27346 7590 11/06/2008 LERNER GREENBERG STEMER LLP FOR INFINEON TECHNOLOGIES AG P.O. BOX 2480 HOLLYWOOD, FL 33022-2480				
EXAMINER				
ZHU, BO HUI ALVIN				
ART UNIT		PAPER NUMBER		
2419				
MAIL DATE		DELIVERY MODE		
11/06/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,929

Applicant(s)

WARMERS, MICHAEL

Examiner

BO HUI A. ZHU

Art Unit

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on August 8, 2008 has been entered.

Claims 1 – 14 are now pending.

Claims 1 – 14 are rejected.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 13 recites “the first Bluetooth address BD_ADDR and the second Bluetooth address BD_ADDR differ in exactly one bit of the lower address part LAP”. The underlined limitation was not disclosed in the original specification of the application.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Bisceglia et al. (US 6,275,498).

(1) with regard to claims 1, 9 and 11:

The admitted prior art discloses a network system based on the Bluetooth standard comprises a primary terminal; one group of secondary terminals, data packets being interchange d by radio between the primary terminal and the group of terminal with a Bluetooth address BD_ADDR of the primary terminal for connection identification (see page 1, lines 20 – 25; page 3, lines 12 – 22. The 48-bit address BD_ADDR of the primary terminal characterizes the network associated with it).

The admitted prior art however, does not disclose the primary terminal having a second interface with a second Bluetooth address BD_ADDR address serving a second group of secondary terminals for connecting users of the second group to the primary terminal.

Bisceglia et al. teaches a router having a plurality of MAC interfaces (first and second interfaces) for connecting different group of users to the router (see column 1, lines 19 – 27). It is inherent that MAC interfaces have unique addresses.

It would have been desirable to have multiple interfaces on an access point (router) because it would allow multiple networks to be manageable by one device, as one interface on an access point is generally related to one network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to

combine the concept of a router as taught by Bisceglia et al. in to the system of the admitted prior art in order to allow multiple networks to be manageable by one single access point.

(2) with regard to claim 2:

The admitted prior art does not disclose a second address therefore does not disclose the difference between the first address and the second address.

However, Bisceglia et al. discloses a router having multiple MAC interfaces. And since the MAC address of an interface is inherently represented by 48 bits and uniquely different, it would be inherent that two interfaces on a router would have two different addresses differed in at least one bit.

It would have been desirable to have multiple interfaces on an access point (router) because it would allow multiple networks to be manageable by one device, as one interface on an access point is generally related to one network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the concept of a router as taught by Bisceglia et al. in to the system of the admitted prior art in order to allow multiple networks to be manageable by one single access point.

(3) with regard to claims 3, 10, 12 and 13:

The admitted prior art discloses that the address of a primary terminal is represented by a 48 bits BD_ADDR address (Fig. 1), and it is the LAP field that is always used for identification of data packets in the network (see page 3, line 22 – page 4, line 7). And it is inherent to the Bluetooth standard that the LAP field is the field that

used for addressing individual devices. Therefore, the prescribed address field is the LAP field of the BD_ADDR address.

(4) with regard to claims 4 and 14:

Although neither the admitted prior art nor Bisceglia et al. specifically discloses the at least one bit in which the first address and the second address differ is a least significant bit in the prescribed address field, it would have been obvious matter of design choice to place the at least one bit in the least significant bit position, or any other bit position in the LAP field with the exception of those that are reserved by the Bluetooth standard, since applicant has not discloses that having the at least one bit placed at a least significant bit in the prescribed address field solves any stated problem or is for any particular purpose and it appears that the system would perform equally well with the at least one bit placing at any bit position in the LAP field with the exception of those that are reserved by the Bluetooth standard.

(5) with regard to claim 5:

The admitted prior art further discloses that one standard primary terminal can serve up to seven secondary terminals (see page 1, lines 22 – 25).

(6) with regard to claim 6:

The admitted prior art further discloses that the data packet contains identification information for indicating a respective group with which the data packet is to be interchanged with (see page 3, line 22 – page 4, line 7).

(7) with regard to claim 7:

The admitted prior art further discloses that the each secondary terminal has a device for stipulating their membership to their corresponding group of secondary terminal (see page 3, line 22 – page 4, line 7. Because all secondary terminals of the same group must transmit data packets with the same identification information, a device in each secondary terminal for processing and managing that identification information would be inherent)

(8) with regard to claim 8:

The admitted prior art disclose a Bluetooth system that has a primary terminal and a group of secondary terminals in which data packets are transmitted by radio, which is qualified as being a digital cordless communication system; and because each terminal in the Bluetooth system is capable of transmitting and receiving packets over a network, each terminal can be considered as computer-controlled device and the secondary terminals can be considered as peripheral devices.

Response to Arguments

6. Applicant's arguments have been fully considered but they are not persuasive.
7. Applicant argues that it would not have been obvious to use two different Bluetooth addresses to identify a primary terminal because the Bluetooth standard specifically requires using only one address and because the Bluetooth standard does not support using two addresses (page 7 of Remarks). Examiner respectfully disagrees. The Examiner is not attempting to use two different Bluetooth addresses to identify a network device or more precisely a network interface of a network device.

Instead, the Examiner's point is that it would have been obvious for one to use two different network addresses to identify two network interfaces of a single network device similar in the way how a router having multiple network interfaces with each interface having a unique network address. As claim 1 (and similarly in claims 11 and 12) essentially calls for a system that comprises a device (primary terminal) equipped with two network interfaces each has a unique network addresses for associating the device with a group of other devices (secondary terminals). The admitted prior art discloses a system in which a primary terminal is equipped with one network interface with one distinct network address for communicating with a group of secondary terminals. The Examiner recognizes that the admitted prior art system does not disclose the primary device having another network interface for communicating with another group of secondary terminals in the same way as the first network interface. However, the technique of equipping one network device with two or multiple network interfaces for associating each interface with a group of other network devices is well known in the art, such as the system disclosed in Bisceglia. The advantage of having multiple of the same network interface configured with different network addresses on a single device instead of just one would be easily recognizable by one of ordinary skill in the art as the extra interfaces would greatly improve the capacity of the network without having to redesign the interface to achieve the extra capacity.

8. Applicant further argues that Bisceglia does not relate to radio transmission or to the Bluetooth standard in particular; and Bisceglia does not provide a suggestion to modify a radio transmission system (page 8 or Remarks). Examiner respectfully

disagrees. Examiner believes they are analogous art because both are related to network interfaces having network addresses for transmission and reception of data packets. And as discussed above, the advantage of having multiple of the same network interface configured with different network addresses on a single device instead of just one would be easily recognizable by one of ordinary skill in the art as the extra interfaces would greatly improve the capacity of the network without having to redesign the interface to achieve the extra capacity.

9. Applicant further argues that when the admitted prior art and the teaching in Bisceglia are considered as a whole as required by tenet (B), they do not suggest the desirability of making the combination and they do not make such a combination obvious (page 9 of Remarks).). Examiner respectfully disagrees. As already discussed above, the combination of the admitted prior art and the teaching in Bisceglia disclose all of the limitation required by the claims; and the advantage of having multiple of the same network interface configured with different network addresses on a single device instead of just one would be easily recognizable by one of ordinary skill in the art as the extra interfaces would greatly improve the capacity of the network without having to redesign the interface to achieve the extra capacity.

10. Applicant further argues that the Bluetooth Standard reserves all bit position of the LAP; and the Bluetooth standard itself rules out using a bit in the LAP to distinguish between different addresses identifying a primary terminal. The Examiner does not agree nor understand what Applicant meant by stating "the Bluetooth Standard reserves all bit positions of the LAP". Applicant has failed to provide evidences as to why it would

not have been obvious matter of design choice to place the at least one bit in the least significant bit position, or any other bit position in the LAP field to distinguish the two network addresses. As already discussed above, the Examiner is not attempting to use two different Bluetooth addresses to identify a network device or more precisely a network interface of a network device. Instead, the Examiner's point is that it would have been obvious for one to use two different network addresses to identify two network interfaces of a single network device similar in the way how a router having multiple network interfaces with each interface having a unique network address.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BO HUI A. ZHU whose telephone number is (571)270-1086. The examiner can normally be reached on Mon-Thur 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BO HUI A ZHU/
Examiner, Art Unit 2419
October 31, 2008

/Hassan Kizou/
Supervisory Patent Examiner, Art Unit 2419